

Title (en)

A SYSTEM AND A METHOD FOR GENERATING AN IMAGE RECOGNITION MODEL AND CLASSIFYING AN INPUT IMAGE

Title (de)

SYSTEM UND VERFAHREN ZUR ERZEUGUNG EINES BILDERKENNUNGSMODELLS UND KLASSIFIZIERUNG EINES EINGANGSBILDES

Title (fr)

SYSTÈME ET PROCÉDÉ DE GÉNÉRATION D'UN MODÈLE DE RECONNAISSANCE D'IMAGE ET DE CLASSIFICATION D'UNE IMAGE D'ENTRÉE

Publication

**EP 4022534 A4 20221130 (EN)**

Application

**EP 20950487 A 20201106**

Priority

SG 2020050642 W 20201106

Abstract (en)

[origin: WO2022098295A1] A method of generating an image recognition model for recognising an input image and a system thereof are provided. The method includes appending at least one feature extraction layer to the image recognition model, extracting a plurality of feature vectors from a set of predetermined images, grouping the plurality of feature vectors into a plurality of categories, clustering the plurality of feature vectors of each of the plurality of categories into at least one cluster, determining at least one centroid for each of the at least one cluster, such that each of the at least one cluster comprises at least one centroid, such that each of the at least one centroid is represented by a feature vector, generating a classification layer based on the feature vector of the at least one centroid of the plurality of categories, and appending the classification layer to the image recognition model. In addition, a method of classifying an input image and a system thereof are provided.

IPC 8 full level

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**G06V 10/762** (2022.01); **G06V 10/82** (2022.01)

CPC (source: AU EP US)

**G06F 18/23213** (2023.01 - AU EP); **G06F 18/24137** (2023.01 - AU EP); **G06N 3/045** (2023.01 - EP); **G06N 3/082** (2013.01 - AU US);  
**G06N 3/088** (2013.01 - EP); **G06V 10/763** (2022.01 - EP); **G06V 10/764** (2022.01 - US); **G06V 10/7715** (2022.01 - US);  
**G06V 10/82** (2022.01 - EP); **G06N 3/084** (2013.01 - EP); G06T 2207/20081 (2013.01 - AU); G06T 2207/20084 (2013.01 - AU)

Citation (search report)

- [I] WO 2016075274 A1 20160519 - THOMSON LICENSING [FR]
- [A] DAS TANMOY: "Machine Learning algorithms for Image Classification of hand digits and face recognition dataset", 31 December 2017 (2017-12-31), XP055974668, Retrieved from the Internet <URL:[https://www.researchgate.net/publication/330798350\\_Machine\\_Learning\\_algorithms\\_for\\_Image\\_Classification\\_of\\_hand\\_digits\\_and\\_face\\_recognition\\_dataset](https://www.researchgate.net/publication/330798350_Machine_Learning_algorithms_for_Image_Classification_of_hand_digits_and_face_recognition_dataset)> [retrieved on 20221025]
- See references of WO 2022098295A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022098295 A1 20220512**; CN 114902249 A 20220812; EP 4022534 A1 20220706; EP 4022534 A4 20221130; US 11869228 B2 20240109;  
US 2023237769 A1 20230727

DOCDB simple family (application)

**SG 2020050642 W 20201106**; CN 202080068054 A 20201106; EP 20950487 A 20201106; US 202017763606 A 20201106